This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-55 (canceled)

1 Claim 56 (original): A method for use with a
2 communication system including a plurality of subcarrier
3 signal paths, a common signal path and a communications
4 channel having a communications channel group signal
5 delay, the method comprising the steps of:
6   operating a processing device to calculate a
7 subcarrier signal path group signal delay introduced by a
8 first one of the subcarrier signal paths;
9   operating said processing device to calculate a
10 common signal path group signal delay introduced by the
11 common signal path;
12   generating, as a function of the calculated
13 subcarrier signal path group signal delay, calculated
14 common signal path group signal delay, and communications
15 channel group signal delay, a minimum cyclic prefix
16 duration.

1 Claim 57 (original): The method of claim 56, wherein the
2 step of generating a minimum cyclic prefix duration
3 includes the step of:
4   operating the processor to calculate a weighted
5 sum of the calculated subcarrier signal path group signal
6 delay, calculated common signal path group signal delay,
7 and communications channel group signal delay.

4

1   Claim 58 (original): The method of claim 56, wherein the

2   step of generating a minimum cyclic prefix duration

3   includes the step of:

4   operating the processor to convolve the

5   calculated subcarrier signal path group signal delay,

6   calculated common signal path group signal delay, and

7   communications channel group signal delay.

1   Claim 59 (original): The method of claim 56, further

2   comprising the step of:

3   operating a prefix signal generator to generate

4   cyclic prefixes having a duration at least as long as

5   said minimum cyclic prefix duration.

1   Claim 60 (original): The method of claim 59, using

2   different cyclic prefix generators working in parallel to

3   generate cyclic prefixes to be inserted into subcarrier

4   signals being transmitted on different ones of said

5   subcarrier signal paths.

1   Claim 61 (original): The method of claim 59,

2   wherein the first one of the subcarrier signal

3   paths is the one of the plurality of subcarrier signal

4   paths which introduces the longest group signal delay

5   into a subcarrier signal, and

6   wherein the step of operating a processing

7   device to calculate a subcarrier signal path group signal

8   delay introduced by a first one of the subcarrier signal

9   paths includes:

10   operating the processor to calculate

11   a subcarrier signal path group signal delay

12   introduced by each one of the subcarrier signal

13   paths; and

14   identifying the longest one of the calculated

15 subcarrier signal path group signal delays as said

16 subcarrier signal path group signal delay introduced by

17 the first one of the subcarrier signal paths.

1 Claim 62 (original): The method of claim 56,

2   wherein the first one of the subcarrier signal

3 paths is the one of the plurality of subcarrier signal

4 paths which introduces the longest group signal delay

5 into a subcarrier signal, and

6   wherein the step of operating a processing

7 device to calculate a subcarrier signal path group signal

8 delay introduced by a first one of the subcarrier signal

9 paths includes:

10   operating the processor to calculate

11   a subcarrier signal path group signal delay

12   introduced by each one of the subcarrier signal

13   paths; and

14   identifying the longest one of the

15   calculated subcarrier signal path group signal

16   delays as said subcarrier signal path group

17   signal delay introduced by the first one of the

18   subcarrier signal paths.